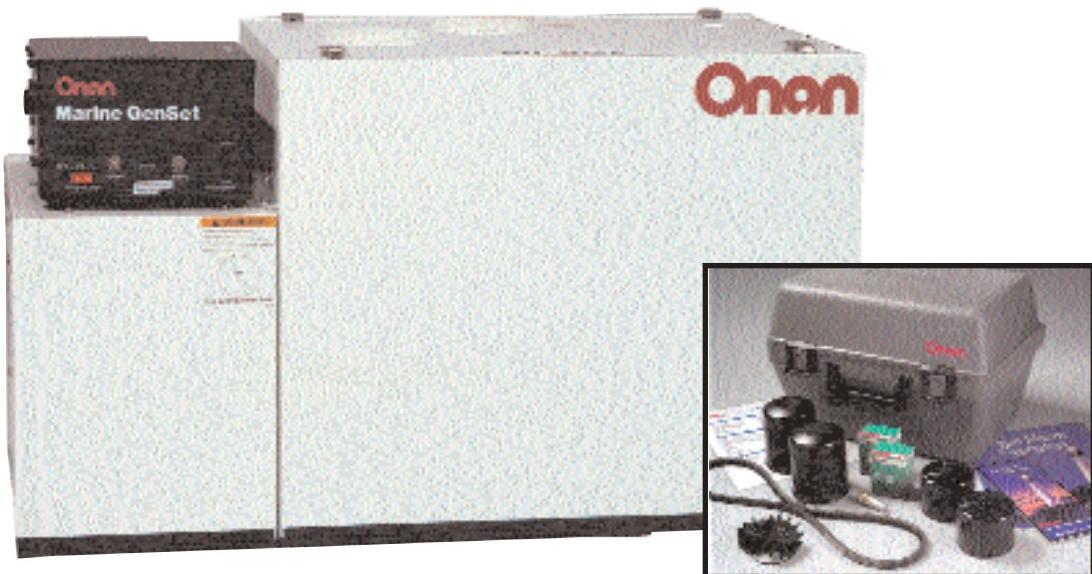
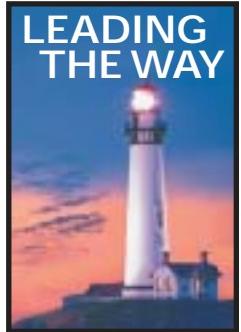


Onan® MARINE GENERATORS



ACCESSORIES & SERVICE SUPPORT CATALOG

MDK, Admiral and Platinum Series

Table of Contents

Onan Marine Gensets	2
Factory Installed Options	2
Field Installed Options:	
Exhaust Accessories, Sound Shields & Cooling System Conversions	3
Meter Panels & Gauges	8
Harnesses.....	11
Miscellaneous Electric	13
Miscellaneous Accessories	16
Set Mounted Circuit Breaker Selection Chart	19
Marine Service Support Literature	26
Marine Service Parts.....	27
Index of Field Installed Options	28

To easily locate the nearest Onan Distributor/Dealer, or for more information, contact Onan at 1-800-888-ONAN or
763-574-5000; 1400 73rd Avenue N.E., Minneapolis, MN 55432 U.S.A.; fax 763-528-7242;
e-mail feedback@onan.com; www.onan.com.

Onan Marine Gensets

These accessories/options apply to 60 and 50 hertz models unless specifically noted otherwise.

Complete Product Line

60-Hz Models & Ratings		50-Hz Models & Ratings		Fuel
1999 and later	Up to 1998	1999 and later	Up to 1998	
5 MDKAU*		4 MDKAU*		Diesel
6.5 MDKUB	6.0	5 MDKUB	5.5	Diesel
9 MDKAL	8	7 MDKAL	6.5	Diesel
9 MDKAV*		7 MDKAV*		Diesel
9 MDKBG*		7 MDKBG*		Diesel
10 MDKWB	9	8 MDKWB	7.5	Diesel
11.5 MDKAA	10.5	9.5 MDKAA	8.5	Diesel
11.5 MDKAW*		9.5 MDKAW		Diesel
13.5 MDKAB	12.5	11 MDKAB	10	Diesel
13.5 MDKAZ*		11 MDKAZ*		Diesel
17 MDKAD	15	13.5 MDKAD	12	Diesel
17 MDKBD*		13.5 MDKBD*		Diesel
21.5 MDKAE	20	17.5 MDKAE	16	Diesel
21.5 MDKBE*		17.5 MDKBE*		Diesel
27.5 MDKAF	25	22.5 MDKAF	20	Diesel
27.5 MDKBF*		22.5 MDKBF*		Diesel
35 MCGBA		30 MCGBA		Diesel
45 MCGCA		35 MCGCA		Diesel
55 MCGGA		45 MCGGA		Diesel
70 MCGDA		60 MCGDA		Diesel
90 MCGDB		65 MCGDB		Diesel
75 MDGDA		65 MDGDA		Diesel
95 MDGDB		75 MDGDB		Diesel
55 MDGDC		45 MDGDC		Diesel
70 MDGDD		60 MDGDD		Diesel
8 MGKBD**		Not Available		Gasoline (Petrol)
10 MGKBC**		8 MGKBC**		Gasoline (Petrol)

* These models are in the e-QD Series of marine gensets. ** These models are in the e-QG Series of marine gensets. Applicable accessories and options are detailed in the e-QG and e-QD Accessories Catalog (F-1379).

Factory-Installed Options

The following gasket options must be factory installed. No field installation kits are available. (Note that not all features below are available on all models as factory options.)

- Extended stack AC generator
- Three-phase AC generator
- Overspeed shutdown¹
- 24V DC electrical system available for MDK series, MCG and MDG series gensets.
- DC gauges installed in set mounted control box²
- Keel cooling³
- Fuel/water separator mounted on the gasket⁴
- Isolated ground⁵

(1) Accessory kit for MCG and MDG series. It is a standard feature on the MDK series.

(2) Accessory kits for MCG/MDG Series MDKAA, MDKAB and MDKAL are available.

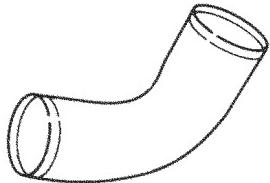
(3) Accessory kit for models MDKAA, MDKAB, MDKAD, MDKAE, MDKAF, and MDKAL are available.

(4) Accessory kit for MCG/MDG Series is available. Standard feature in the integral fuel filter on MDK series models.

(5) Accessory kits for models MDKUB, MDKAL, MDKWB, MDKAA, and MDKAB are available.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Stainless Steel Exhaust Elbow



For exhaust connections made through the generator sound shield

Model (50/60 Hz)	155-2033*
MDKUB	◆
MDKAL	◆
MDKWB	◆
MDKAA	◆
MDKAB	◆
MDKAD	◆
MDKAE	◆
MDKAF	◆

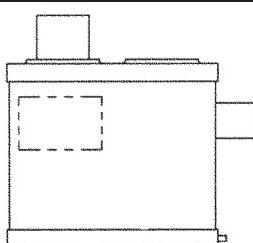
* 90° elbow, 2" OD.

Wet Exhaust Hose For Exhaust Systems

Model	Hose ID (inches)	10 Feet	Make from Onan pn.
MDKUB	2"	503-1353	503-1320
MDKAL	2"	503-1353	503-1320
MDKWB	2"	503-1353	503-1320
MDKAA	2"	503-1353	503-1320
MDKAB	2"	503-1353	503-1320
MDKAD	2"	503-1353	503-1320
MDKAE	2"	503-1353	503-1320
MDKAF	2"	503-1353	503-1320
MDKAF *	2-1/2"	503-1302	503-1288
MCG or MDG series	3-1/2"	503-1308	503-1290

* For use on exhaust outlet connection on water lift muffler that has a 2 1/2" diameter outlet.

Wet Exhaust Muffler



Waterlift Muffler (WL)
(155-3222 shown)

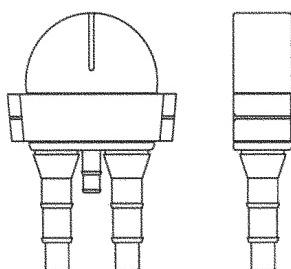
Model	155-2030 WL 2"	155-3147 WL & RES 2"	155-2019 WL 3-1/2"	155-3222 WL 2 x 2-1/2"
Connection Size				
MDKUB		◆		
MDKAL	◆			
MDKWB	◆			
MDKAA	◆			
MDKAB	◆			
MDKAD	◆			
MDKAE	◆			
MDKAF				◆
MCG or MDG series			◆	

WL - Waterlift Muffler

RES - Resonator (Secondary Muffler)

SEP - Water Separator (Secondary Muffler)

The exhaust resonator or water separator in kits have much lower exhaust noise levels than kit 155-2030 water lift muffler alone in the exhaust system.

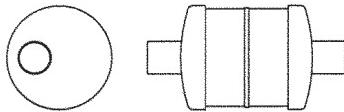


Water Separator with
Mounting Bracket (SEP)

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Wet Exhaust Muffler

(Continued from previous page.)



Resonator (RES)

Model	155-3223 WL & SEP	155-3224 SEP	155-3217 WL & SEP	155-3216 SEP	155-2230* WL	541-0599 WL & RES
Connection Size	2 x 2-1/2"	2-1/2"	2"	2"	2"	2" x 2"
MDKUB			◆	◆	◆	◆
MDKAL			◆	◆		◆
MDKWB			◆	◆	◆	◆
MDKAA			◆	◆	◆	◆
MDKAB			◆	◆		
MDKAD			◆	◆		
MDKAE			◆	◆		
MDKAF	◆	◆				

WL - Waterlift Muffler

RES - Resonator (Secondary Muffler)

SEP - Water Separator (Secondary Muffler)

* Water lift muffler with end inlet and outlet for low profile applications (available from Parts Distribution (MDC)).

Front Exhaust Exit (Wet Exhaust-Engine End)

Model	155-3240	155-3257	155-3284 *
MDKAL	◆		
MDKAA		◆	
MDKAB		◆	
MDKAD			◆
MDKAE			◆
MDKAF			◆

* Kit consists of rubber elbow and hardware to allow directing exhaust towards front. Installer to route exhaust connection inside sound shield to exhaust elbow.

Dry Exhaust Muffler

Model	Industrial 155-2063-09	Critical 155-2064-09	Industrial 155-0077 *
MDKAL 1-1/4" NPT			◆
MDKAA 1-1/4" NPT			◆
MDKAB 1-1/4" NPT			◆
MDKAD 2" NPT	◆	◆	
MDKAE 2" NPT	◆	◆	
MDKAF 2" NPT	◆	◆	

Part Number**	Application
MCGBA, CA	Industrial
MCGBA, CA	Critical
MCGGA, DA, DB	Industrial
MDGDA, DB	Industrial
MCGGA, DA, DB	Critical
MDGDA, DB	Critical

* Requires installer to supply flexible exhaust connection and elbow—Mufflers have end inlet & outlet (available from Parts Distribution (MDC)).

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Dry Exhaust Conversion	Model	155-3094	155-2980	155-3146
MDKAL	1-1/4" NPT			◆
MDKAA	1-1/4" NPT			◆
MDKAB	1-1/4" NPT			◆
MDKAD	2" NPT	◆	◆	
MDKAE	2" NPT	◆	◆	
MDKAF	2" NPT	◆	◆	

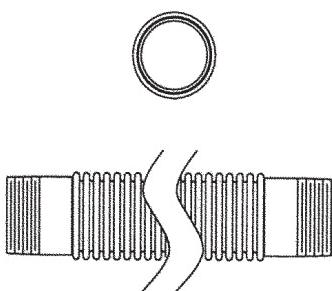
These kits can be used with a keel cooling conversion kit or alone. Installer will need to develop adequate protection against contact or fire hazard. If used with a housed set the housing roof will need to be modified for the exhaust exit and exhaust section inside the sound shield insulated to prevent any additional heat rejection inside the sound shield.

Keel Cooling Conversion System	Model	155-3199	155-3087	155-3148-01*	155-3148-02*
MDKAL	◆				
MDKAA	◆				
MDKAB	◆				
MDKAD		◆	◆		
MDKAE		◆	◆		
MDKAF		◆			◆

* Keel cooling kit used with wet exhaust system. Remaining kits require selection from "dry exhaust conversion" kit and related accessories.

If the total coolant volume exceeds 2.5 gallons an external expansion tank (with a minimum of 5% by volume of total liquid capacity) is required and the set mounted pressure relief cap has to be located on the expansion tank. The genset engine would be equipped with a non-pressure relief cap 130-4718 for MDKAD/E spec A or B; MDKAF spec A (order separately); 130-4642 cap for MDKAD/E/F later specs.

Flexible Exhaust Tube (For Dry Exhaust Systems)



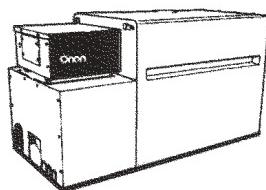
Model	Flexible Coupling	
	155-2355-02	155-2955-04
MDKAL	1-1/4" NPT	◆
MDKAA	1-1/4" NPT	◆
MDKAB	1-1/4" NPT	◆
MDKAD	2" NPT	◆
MDKAE	2" NPT	◆
MDKAF	2" NPT	◆
MCG or MDG series	*	155-2356-09

Flexible coupling has flange connections that are 18 in. (45.7 cm) long stainless steel spiral or annular corrugated open pitch type tubing.

* Flange dimensions: OD: 7.5 in; ID: 3 in nominal pipe; 4 holes with 0.75 in diameter; 6 in between centers.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

Sound Shield



Sound shields* For MCG, MDG Series with low profile, wet exhaust options. Consult factory for dry exhaust applications.

*All MCG/MDG Series Sound Shields require Circuit Breaker Mounting Box (K882) and Oil Filter Fuel Pump Side Option (H519) features on the generator set.

Model	405-5253	405-5252	405-5743	405-6081	405-6136
MDKAL				◆	
MDKAA					◆
MDKAB					◆
MDKAD	◆				
MDKAE		◆			
MDKAF			◆		

Sheet steel, insulated with sound attenuating material, easily removable panels, for convenient access to controls, brilliant white paint. Order Option F142 for factory installations.

Sound Shield Kit	Length	Width	Height	Weight lb. (kg)
405-5253	44.3	23.7	28.8	130 (59)
405-5252	45.7	23.7	28.8	130 (59)
405-5743	53.5 (1355)	23.7 (602.2)	31.34 (795.9)	145 (65.8)
405-6081	36 (915)	22.4 (568)	23.5 (596)	85 (38.6)
405-6136	40.83 (1037)	22.4 (568)	23.5 (596)	85 (38.6)

Model No.	Housing Part No.	Use With	Generator Frame No.
30/35 MCGBA	405-5461	2C, 2D, 2G, 2F, 2G	
35/45 MCGCA	405-5461	All except for options listed below	2G, 2F, 2G, 3G
	405-5462	B269, B341	3C
45/55 MCGGA	405-5463	B256, B257, B274, B275, B328, B329	2E, 2F, 2G,
MDGDC	405-5464	B268, B340, B341	3D
	405-5465	B269	
60/70	405-5465	B269	3E
MCGDA &	405-5463	B256	3C
65/75		B257, B268, B274, B275, B328, B329, B269, B341	3D, 3F, 3D, 3C
MDGDA	405-5465	B347	3E
MDGDD			
65/95	405-5463	All except for options listed below	
MCGDB &	405-5464	B256, B257, B274, B275, B328, B329, B268, B269, B340, B341, B347	3D
75/95 MDGDB	405-5465		3E, 3F
All Models MCG, MDG Series	405-5460	Sound shield conversion kit for PTO	

Model Kit	Length	Width	Height	Weight lb. (kg)
405-5253	44.3	23.7	28.8	130 (59)
405-5252	45.7	23.7	28.8	130 (59)
405-5743	53.5 (1355)	23.7 (602.2)	31.34 (795.9)	145 (65.8)
405-6081	36 (915)	22.4 (568)	23.5 (596)	85 (38.6)
405-6136	40.83 (1037)	22.4 (568)	23.5 (596)	85 (38.6)

Model	Engine & Generator Frame*	Sound Shield Kit	Length	Width	Height
MCGBA, MCGCA	4 Cyl. & 2C-2G	405-5461	69.25 (1759)	36 (914.4)	40.9 (1038)
MCGCA	4 Cyl. & 3C-3G	405-5462	69.25 (1759)	36 (914.4)	40.9 (1038)
MCGGA, MDGDC	6 Cyl. & 2C-2G	405-5463	78.7 (1999)	36 (914.4)	40.9 (1038)
MCGGA, MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD	6 Cyl. & 3C-3D	405-5464	78.7 (1999)	36 (914.4)	40.9 (1038)
MCGGA, MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD	6 Cyl. & 3E-3H	405-5465	85 (2159)	36 (914.4)	40.9 (1038)
All Models	All Models	405-5460		36 (914.4)	40.9 (1038)

* See Generator Frame Selection chart next page.

Field Installed Options: Exhaust Accessories, Sound Shields & Cooling System Conversions

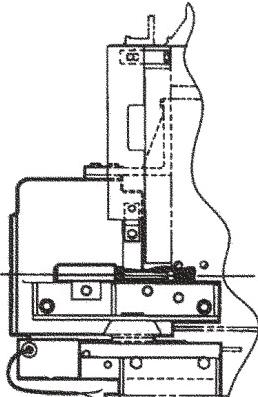
Generator Frame Selection Chart

GEN. OPTION

GEN. FRAME

	MCGBA	MCGCA	MCGGA	MCGDA	MCGDB	MDGDA	MDGDB	MDGDC	MDGDD
B256 60 hz, 12L, 105C, broad range	2C	2E	2F	3C	3D	3C	3D	2F	3C
B268 60 hz, 12L, Full 1 ph, 105C, broad range	2F	2G	2D	3F	3H	3F	3H	2D	3F
B257 60 hz, 12L, 80C, broad range	2D	2F	2G	3D	3E	3D	3E	2G	3D
B269 60 hz, 12L, Full 1 ph, 80C, broad range	2G	2C	2E	3F	3H	3F	3H	2E	3F
B274 60 hz, 4L, 1 phase, 105C	2D	2E	2F	3C	3E	3C	3E	2F	3C
B275 60 hz, 4L, 1 phase, 80C	2D	2F	2G	3D	3F	3D	3F	2G	3D
B328 50 hz, 12L, 105C, broad range	2C	2E	2F	3C	3D	3C	3D	2F	3C
B340 50 hz, 12L, Full 1 ph, 105C, broad range	2F	2G	2D	3D	3E	3F	3G	2D	3F
B329 50 hz, 12L, 80C, broad range	2D	2F	2F	3D	3D	3D	3E	2F	3D
B341 50 hz, 12L, Full 1 ph, 80C, broad range	2F	2C	2D	3E	3E	3F	3H	2D	3F
B346 50 hz, 4L, 1 phase, 105C	2D	2E	2F	3D	3D	3D	3D	2F	3D
B347 50 hz, 4L, 1 phase, 80C	2E	2F	2F	3E	3E	3E	3E	2F	3E

Front Power Take-Off (FPTO)



Model	Kit Number	Application
All MCG/MDG*	190-0725	12V DC, 70 HP
All MCG/MDG*	190-0726	24V DC, 70 HP
All MCG/MDG*	190-0727	12V DC, 100 HP
All MCG/MDG*	190-0728	24V DC, 100 HP

* Front power take-off is configured for a "C" splined 1-1/4" pump shaft (SAE J744). Includes torsional coupling and electric clutch. Option codes A348 and A357.

Group No.	I	I	II	II	III	III	III
	190-0738 12V Content PTO	190-0739 24V PTO	190-0740 Adapter	190-0741 Adapter	405-6576 Panel	405-6579 Panel	190-0744 Belt Guard
MDKAD	◆	◆	◆		◆		◆
MDKAE	◆	◆	◆		◆		◆
MDKAF	◆	◆		◆		◆	◆

The Front power take-off is configured for SAE splined 2 & 4 bolt mounting (SAE J744). Includes torsional coupling and electric clutch. (Option A183 (12V) or (24V) based on feature on engine). When configuring set with PTO the following guideline is offered:

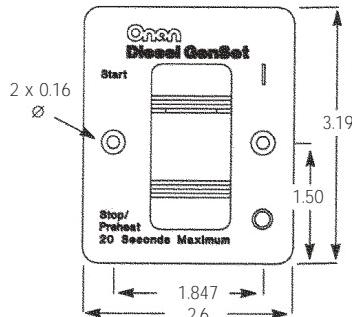
- 1.The PTO is only compatible on MDKAD/MDKAE in spec letter B or later.
2. Select PTO from Group I.
3. Select engine adapter from Group II.
4. Select housing panel for housed set or belt guard for unhoused set from Group III.

PTO Available HP

Model	Hp (kw) @50 Hz (1500 rpm)	Hp (kw) @60 Hz (1800 rpm)
MDKAD	20 (14.9)	24 (17.9)
MDKAE	25.4 (18.9)	30 (22.4)
MDKAF	30.5 (22.8)	36 (26.9)
MCGBA	45 (34)	55 (41)
MCGCA	56 (42)	71 (53)
MCGGA	67 (50)	81 (61)
MCGDA & MDGDA	96 (72)	100 (75)
MCGDB & MDGDB	96 (72)	100 (75)

Field Installed Options: Meter Panels & Gauges

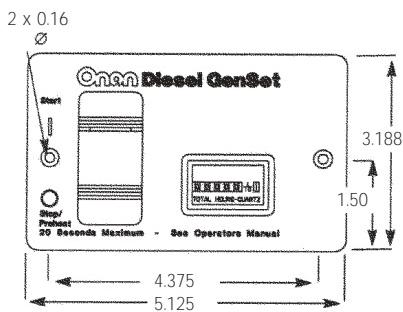
Basic Panel



Type of Control Model	300-4990-01 With Preheat (12V)	300-4990-02 With Preheat (24V)	300-4990-03 Without Preheat (12V)	300-4990-04 Without Preheat (24V)
MDKUB	◆			
MDKAL	◆	◆*		
MDKWB	◆			
MDKAA	◆		◆	
MDKAB	◆		◆	
10/12.5 MDKAD	◆		◆	
MDKAD	◆		◆	
MDKAE	◆		◆	
MDKAF	◆	◆		
MCG or MDG Series			◆	◆

* MDKAL Spec B.

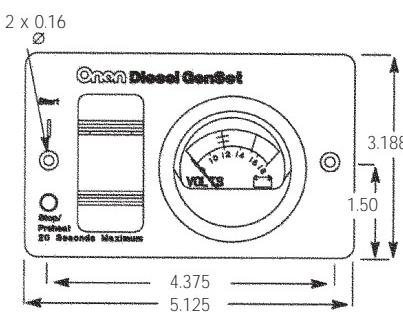
Deluxe Panel With Hourmeter



Type of Control Model	300-4991-01 (12V)	300-4991-02 With Preheat (24V)	300-4991-03 Without Preheat (12V)	300-4991-04 Without Preheat (24V)
MDKUB	◆			
MDKAL	◆	◆*		
MDKWB	◆			
MDKAA	◆		◆	
MDKAB	◆		◆	
MDKAD	◆		◆	
MDKAE	◆		◆	
MDKAF	◆	◆		
MCG or MDG Series			◆	◆

* MDKAL Spec B.

Deluxe Panel With Voltmeter



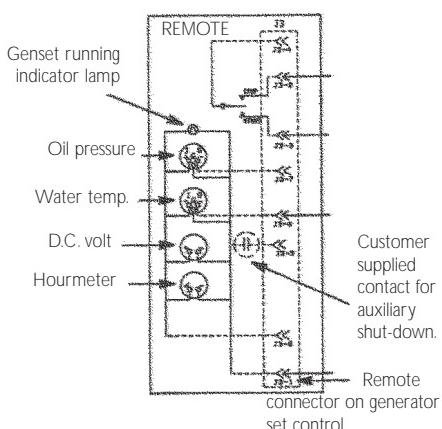
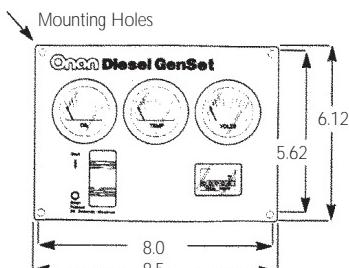
Type of Control Model	300-4989-01 With Preheat (12V)	300-4989-02 (24V)	300-4989-03 Without Preheat (12V)	300-4989-04 Without Preheat (24V)
MDKUB	◆			
MDKAL	◆	◆*		
MDKWB	◆			
MDKAA	◆		◆	
MDKAB	◆		◆	
10/12.5 MDKAD	◆		◆	
MDKAD	◆		◆	
MDKAE	◆		◆	
MDKAF	◆	◆		
MCG or MDG Series			◆	◆

* MDKAL Spec B.

Field Installed Options: Meter Panels & Gauges

Remote Gauge Panels

4 x 0.16



Model	300-5018-01 (12V)	300-5018-02 (24V)	300-5018-03 (12V)	300-5018-04 (24V)	Senders Iso. or Neg.	Senders Neg. Gd	Senders Iso. Gd.
MDKUB*	◆					◆	◆
MDKAL+	◆	◆				◆	◆
MDKWB*	◆					◆	◆
MDKAA+	◆	◆				◆	◆
MDKAB+	◆	◆				◆	◆
10/12.5 MDKAD+	◆	◆				◆	◆
MDKAD+	◆	◆				◆	◆
MDKAE+	◆	◆				◆	◆
MDKAF+	◆	◆				◆	◆
MCG or MDG Series**			◆		◆		

+ Remote panel kits for use on MDKxx series sets do not include senders. If the set is not equipped with the gauge panel option (H506) then sender kit must also be ordered from this list. If two gauge panels are connected to the set one set of gauges must be disconnected or a momentary dual gauge switch must be installed in the set control also (see separate section for switch selection).

* MDKUB/MDKWB models require oil pressure sender installation adapter kit 100-3440 and must also be ordered.

** MCG & MDG series gensets include a gauge panel and senders on the set. Remote accessory gauge panel requires disconnecting the set mounted gauges or installation of a dual gauge momentary switch for correct operation (see separate section for switch selection).

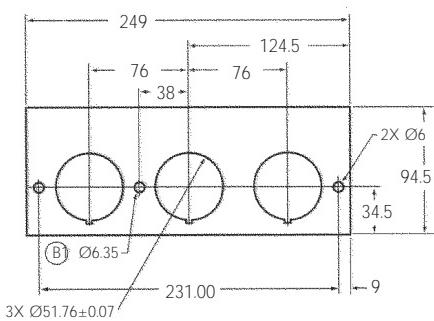
Start/stop switch, hour meter, voltmeter, oil pressure gauge on a surface-mounted panel with all wiring terminated to a plug to fit the optional wiring harness between genset and remote panel.

Dual Gauge Conversion

Momentary switch mounts in the DC control panel. Allows operation of set mounted gauges oil pressure and water temperature momentarily at the set when required. Operates the remote panel the rest of the time.

Model	300-4835	300-4835-01	300-4835-02
MDKAL		◆	
MDKAA		◆	
MDKAB		◆	
MDKAD	◆		
MDKAE	◆		
MDKAF	◆		
MCG or MDG Series			◆

Set Mounted Gauge Panel



Model	Part No. Application	300-5038 Panel (12V)	300-5039 Panel (24V)	300-5040 Senders Neg. Grnd.	300-5041 Senders Iso. Grnd.
MDKAL	◆	◆	◆	◆	◆
MDKAA	◆	◆	◆	◆	◆
MDKAB	◆	◆	◆	◆	◆
MDKAD/E/F *	◆	◆	◆	◆	◆

This panel assembly replaces the blank panel on a set not equipped with gauge option (H506) and has a mating plug to connect to the connector inside the DC control box. Separate sender kit has to be procured depending whether it has a negative ground or isolated system on the genset. Panel and sender kit selection allows installation of option H506 (gauge panel) in the field.

* When customer requires the set mounted gauge panel feature (H506) on models MDKAD/MDKAE/MDKAF not equipped with this feature the above kits can be selected to locate a three gauge panel mounted off the set in the engine room instead. The arrangement consists of a panel with gauges, an extension harness of appropriate length and Y adapter harness (part no. 338-3697, 249 mm long).

Field Installed Options: Meter Panels & Gauges

A/C Meter Panel	Model	Kit Number
	All MCG/MDG	300-3972

Includes A/C Voltmeter, frequency meter, phase selector switch and wiring harness. If an ammeter is to be supplied, pick a kit from the list of ammeter/CT kits below. Option code K001.

Ammeter/CT Kits	Kit Number	Scale (Amps)
	300-3973	0-50/0-100
	300-3974	0-75/0-150
	300-3975	0-100/0-200
	300-3976	0-150/0-300
	300-3977	0-200/0-400
	300-3978	0-250/0-500
MCG or MDG Series only.	300-3979	0-375/0-750

Kits include dual scale ammeter, 3 current transformers, and wire ties. use with AC meter panel above.

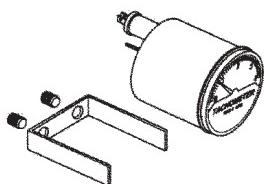
Oil Temperature Gauge

Model	Kit Number	Application	Feature Option	Instruction Sheet
All MCG/MDG	300-4011	12 VDC	K486	C373
All MCG/MDG	300-4026	24 VDC	K486	C373

Provides temperature of the lube oil in the oil pan.

Genset must have 6 ga. panel (option H507) and optional harness (option H510).

Tachometer



Model	Kit Number	Application	Instruction Sheet
All MCG/MDG's	300-4007	12V*	C371
All MCG/MDG's	300-4025	Mechanical**	C371

* For 24V add resistor 193-0250

** Requires set equipped with option A039—No Alternator (idler pulley only).

Measures and indicates engine speed in revolutions per minute. Option code K145. Genset must have option H507 gauge panel and option H510 harness.

Safety Shutdown Override

Model	Kit Number	Feature Option	Instruction Sheet	Application
All MCG/MDG's	300-4012	K838	C376	12 VDC
All MCG/MDG's	300-4027	K838	C376	24 VDC

Provides a switch wired in the safety shutdown system that will allow the operator to by-pass the safety shutdowns and allow the genset to continue to run.

Control Options

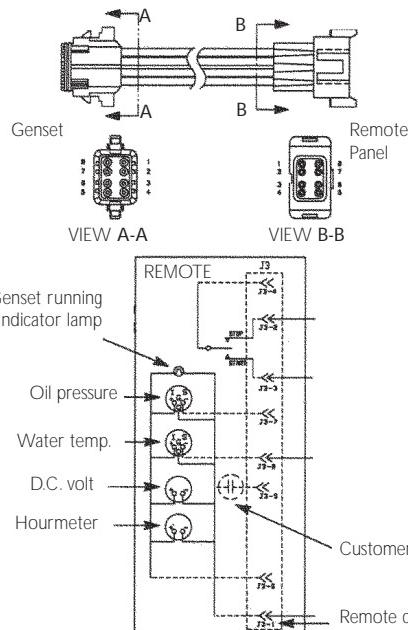
6 Gauge Control Conversions

Model	Kit Number	Feature Option	Instruction Sheet
All MCG/MDG's	300-4004	H507	C367

Kit contains sheet metal only for mounting up to 6 gauges and all individual annunciation. Select additional gauges and other options from above. Requires re-mounting of gauge (4) removed from the standard genset control.

Field Installed Options: Harnesses

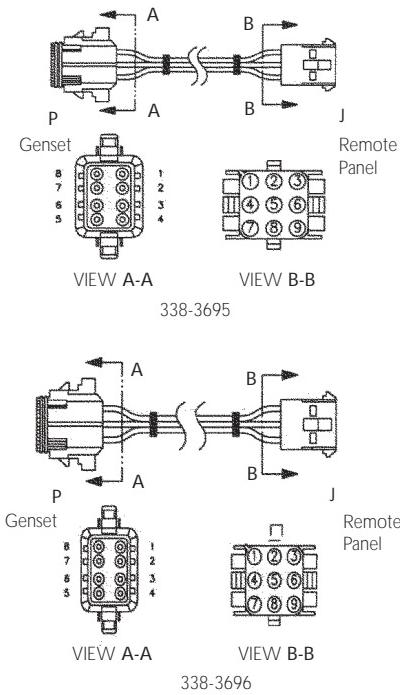
Harnesses for all the Accessory Panels—Basic, Deluxe, or Gauge Package



Model	15 FT	25 FT	45 FT	75 Ft	100 FT	150 FT	Pigtail
	338-3167	338-3168	338-3169	338-3169-01	338-3169-02	338-3169-03	338-3098
MDKUB	◆	◆	◆	◆	◆	◆	◆
MDKAL	◆	◆	◆	◆	◆	◆	◆
MDKWB	◆	◆	◆	◆	◆	◆	◆
MDKAA	◆	◆	◆	◆	◆	◆	◆
MDKAB	◆	◆	◆	◆	◆	◆	◆
MDKAD	◆	◆	◆	◆	◆	◆	◆
MDKAE	◆	◆	◆	◆	◆	◆	◆
MDKAF	◆	◆	◆	◆	◆	◆	◆
MCG or MDG Series	◆	◆	◆	◆	◆	◆	◆

These harnesses are equipped with Deutsch water proof connectors on both ends (except pigtail) to mate with available panels and set mounted remote connector.

Adapter Harnesses



Model 338-3695*

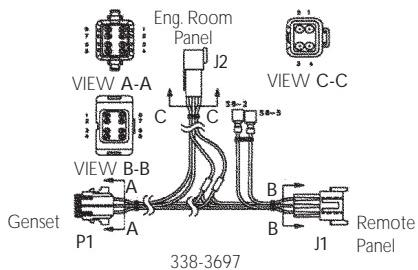
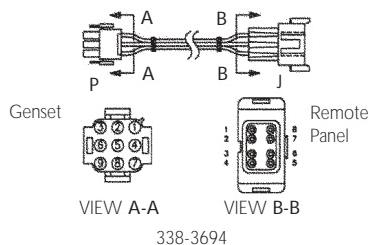
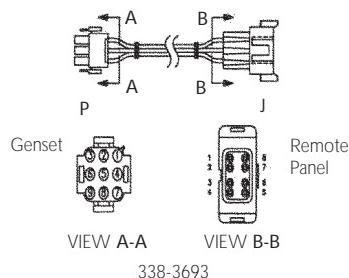
MDKUB	◆	◆
MDKAL	◆	◆
MDKWB	◆	◆
MDKAA	◆	◆
MDKAB	◆	◆
MDKAD	◆	◆
MDKAE	◆	◆
MDKAF	◆	◆

* ADAPTER HARNESSES FOR ALL MDK series set for re-power installations when replacing a MDKC, MDKD, MDL3, MDL4 or MDL6 marine generator set that had a single switch for start/stop and pre-heat. Approximately 6 inches long.

** ADAPTER HARNESSES FOR ALL MDK series set for re-power installations when replacing a MDL3, MDL4 or MDL6 marine generator set that had a separate pre-heat switch system. Approximately 6 inches long.

Field Installed Options: Harnesses

Adapter Harnesses



Harnesses for connecting current remote accessory panels to noncurrent marine generator sets.

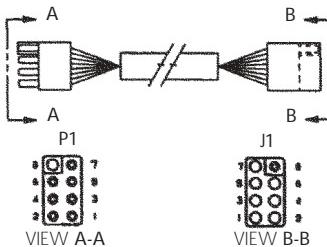
ADAPTER HARNESSES FOR MDKC, MDKD, MDL series sets to connect any of the current remote accessory panels. The marine genset should have a separate pre-heat circuit for this to apply. Approximately 6 inches long. PN 338-3693.

ADAPTER HARNESSES FOR MDKC, MDKD, MDL series sets to connect any of the current remote accessory panels. The marine genset should have a single stop/start and pre-heat circuit as the pre-heat cycle was part of the standard cranking process. Approximately 6 inches long. PN 338-3694.

ADAPTER HARNESSES FOR ALL MDKD, MDKAE & MDKAF sets (dual gauges in the system) when installing a remote panel in the engine room (because the set does not have a gauge panel option in the control) and another accessory panel remote from the genset. PN 338-3697.

AC Control Extension Harness (20 Feet)

Wiring Harnesses for remote mounting AC control panel.



If the AC control is to be mounted remotely from the genset, the following harness extension may be used.

Model	Part Number
All MCG/MDG	338-2694

DC Control Harness Extension

If a set control is to be remotely mounted from the generator set, the following harnesses may be used. *Note: For standard controls with options (H510) an additional harness PN 338-2597 is required on MCG and MDG series product.

Model	Length	Part Number	Application	Instruction Sheet
MCG/MDG	20 ft.	338-2597*	4 Gauge Control	None
MCG/MDG	20 ft.	338-2599*	6 Gauge Control	None
MDKAL/Spec A	10 ft.	338-3643	DC Control	None
MDKAL/Spec B, MDKAA & MDKAB	10 ft.	338-3730	DC Control	None
MDKAL/MDKAA/ MDKAB	10 ft.	338-3644	AC Voltage Regulator	None

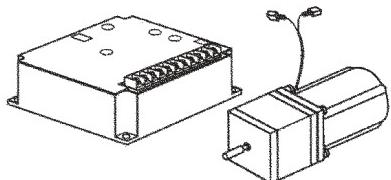
Field Installed Options: Miscellaneous Electric

Control Options Wiring Harness

When adding the 6 gauge control conversion and any of the following options, you must order one of these harnesses. Options B181, H389, H514, K145, K486, E086.

Model	Kit Number	Feature Options	Instruction Sheet
MCG or MDG			
BA, CA	300-4013	H510	C370
MCG or MDG			
GGA, DA, DB	300-4006	H510	C370

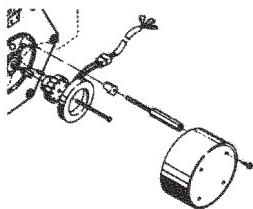
Electronic Governor



Model	150-2541 (12 VDC)	150-2538 (24 VDC)
All MCG/MDG	◆	◆

Electronic governors provide precise frequency control of the engine generator set. The electronic governor system consists of a magnetic pick-up, the governor control, the actuator and related wiring. The frequency regulation of electronic governors is isochronous for any constant load from no load to 100% load. This governor therefore maintains a constant steady-state speed regardless of the load applied to the generator set. Random frequency variation does not exceed (0.25%). Option code A275.

PMG Upgrade



Model	Kit Number
All MCG/MDG	300-4676

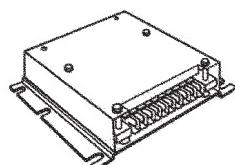
This kit includes the PMG voltage regulator, PMG rotor and stator, end bell cover, and associated wiring for upgrading to a PMG system from a shunt excited system. Option code B184.

Compensator—Droop

Required for paralleling with Electronic Governor and PMG Upgrade.

Kit Number	Selection guideline
300-3766-03	UC2 generator frame, 3 phase
300-3766-04	UC3 generator frame, 3 phase
300-3766-05	UC2 generator frame, 1 phase, 45 kw or above
300-3766-06	UC3 generator frame, 1 phase
300-3766-09	UC2 generator frame, 1 phase, 35 kw or smaller

Voltage Regulator, Manual



Model	Kit Number
All MCG/MDG	300-3713

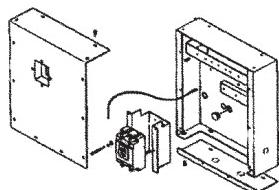
A hand controlled excitation system for emergency operation. Designed to trail an automatic voltage regulator in parallel. Option code K939.

Field Installed Options: Miscellaneous Electric

	Model	AC Volts	Watts	Kit Number
Heater Oil Pan	All MCG/MDG	120V	150	333-0482
	All MCG/MDG	240V	150	333-0483

An immersion type heater installed in the oil pan in one of the drain holes. This heater is not thermostatically controlled. Option codes H487, H479.

	Model	Kit Number
Circuit Breaker Mounting Kit	All MCG/MDG	320-1711



This kit includes the circuit breaker mounting box and all of the associated mounting hardware, but does not include the circuit breaker. Pick the appropriate circuit breaker from tables on pages 22 to 24. Option code K882.

Cross Current Compensation	Provides a parallel droop compensator for adjusting the share of total reactive load carried by the generator sets. For paralleled sets, generator set must use MX321 AC voltage regulator (PMG option B184) with this option.
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Model	Kit Number	Feature Option	Remarks	Application
MCGBA	300-5341-01	K611	3PH, only	Frame UC2
MCGCA, MCGGA	300-5341-02	K611	3PH, only	Frame UC2
MCGCA, MCGGA, MCGDA, MCGDB	300-5341-03	K611	3PH, only	Frame UC3

For single-phase output paralleling transformer selection consult factory.

Annunciation	Provides for local annunciation of all safeties on the genset; low oil pressure, high engine temperature, low coolant level, overspeed, high exhaust temperature and low oil level. The safeties are not included in this kit and must be present for this accessory to operate.
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Model	Kit Number	Feature Options	Instruction Sheet
All MCG/MDG	300-4008	H514	C374

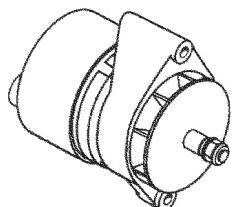
Dry Contacts Alarm Relay	Provides a relay with a N/O contact that would give a common alarm of the safety devices for customer remote annunciation. Contact rated 15 amp at 125 VAC or 250 VAC or 10 amp at 277 VAC.
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Model	Kit Number	Application	Feature Option	Instruction Sheet
All MCG/MDG	300-4009	12 VDC	H194	C374
All MCG/MDG	300-4023	24 VDC	H194	C374

Field Installed Options: Miscellaneous Electric

Alternator

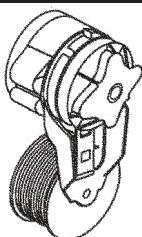
45 amp battery charging alternator. Option Code A-334.



Belt Tensioner

Model	Kit Number
All MCG/MDG	191-2098

When the battery charging alternator is removed, a belt tensioner is required in the place where the alternator was, to take up belt tension. Option code A039.



Heater Battery

Model	Part Number
All	333-0469

A heater pad to keep a little warmth in the battery for better starting in low ambients, 200 watts–120 VAC.

Overspeed Shutdown

Model	Kit Number	Application	Feature Option	Instruction Sheet
All MCG/MDG	300-5339-01	12 VDC	B222	N/A
All MCG/MDG	300-5339-02	24 VDC	B222	N/A
All MCG/MDG	300-4010*	12 VDC	B181	C372
All MCG/MDG	300-4024*	24 VDC	B181	C372

Kit consists of an electronic overspeed switch, interconnecting relay, wires and mounting hardware that allows shutdown of the set in an overspeed condition and operates the fault circuit breaker. This option requires the set to be equipped with the DC alternator option A344 for signal input. Consult factory for set not equipped with the standard alternator.

* Overspeed shutdown switch only available with PMG (option B184).

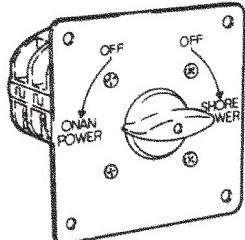
Isolated DC Conversion System

The following kits allow conversion of the generator set DC system from negative ground to isolated DC. Please note that the DC isolation is effective when the set is not operating or is running. It is grounded during cranking and pre-heat cycles.

Model	Part Number	Application	Instruction Sheet
MDKUB/MDKWB	300-4960	12 VDC	C-543
MDKAL/Spec A	300-5122	12VDC	None
MDKAL/Spec B, MDKAA & MDKAB	300-5170	12 VDC	M-099

Field Installed Options: Miscellaneous Accessories

Manual Transfer Switch



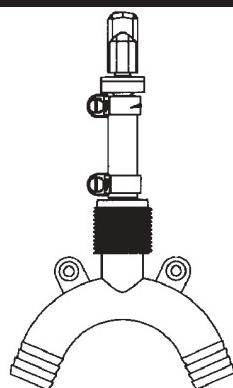
Model	308-0269*	308-0270**
MDKUB	◆	◆
MDKAL	◆	◆
MDKWB	◆	◆
MDKAA	◆	◆
MDKAB	◆	◆
MDKAD	◆	◆

*2-wire, 120V

**3-wire, 120/240V

A simply designed rotary switch transfers loads from generator to shore power—rated for max. of 63 amps per pole.

Siphon Break Kit

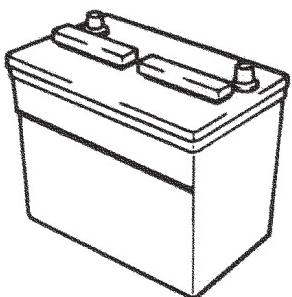


Model	541-0877-01	541-0863-02	541-0863-01	541-0867-01
MDKUB	◆			
MDKAL				◆
MDKWB		◆		
MDKAA				◆
MDKAB				◆
MDKAD		◆*		◆
MDKAE		◆*		◆
MDKAF				◆
MCG or MDG Series	◆			

Prevent flotation water from being siphoned into the exhaust manifold and cylinders on engines installed below the load waterline.

* Spec A only

Starting Batteries



Model	416-0457*	416-0796**	416-0823***
MDKUB	Qty 1		
MDKWB	Qty 1		
MDKAA, MDKAB, MDKAD, MDKAE, MDKAF, MDKAL	Qty 2 (12V)	Qty 1 (12V)	Qty 1 (12V)
MDKAB	Qty 2 (12V)	Qty 1 (12V) Qty 2 (24V)	Qty 1 (12V) Qty 2 (24V)
MCG or MDG series		Qty 1 (12V) Qty 2 (24V)	Qty 1 (12V) Qty 2 (24V)

*6V, 560 CCA

**12V, 625 CCA

***12V, 650 CCA

CCA rating is at 0 degrees F. All batteries are shipped dry. Order electrolytes from your Onan distributor.

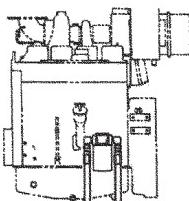
Metric Adapter Fittings For Fuel Lines

Model	149-2612
MDKAL, MDKAA, MDKAB	◆
MDKAD, MDKAE, MDKAF	◆

Two fittings for fuel supply and return. Convert 1/4 in NPT to 8 mm pipe thread (compression fittings). These fittings are standard on 50 Hz MDKUB and MDKWB gensets.

Field Installed Options: Miscellaneous Accessories

Engine Oil Filter Fuel Pump Side



Model	Kit Number
MCGBA, GA Nat.Aspirated	122-0786
MCGCA - W/E073	122-0795
MCGCA - W/E086	122-0796
MCGDA, DB - W/E073	122-0787
MCGDA, DB - W/E086	122-0797

Kit contains the oil filter, oil lines and associated hardware for mounting the filter on the fuel pump side of the engine. Oil lines comply with US Coast Guard regulations. Option code H519.

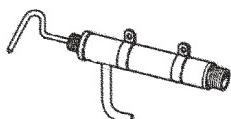
Low Coolant Level Shutdown

Measures coolant level in the expansion tank and provides warning of low coolant level and set shutdown. These kits are the same for negative ground or isolated DC systems. MCD/MDG series include a relay and leads for mounting inside the DC control.

Model	Kit Number	Application	Feature Option	Instruction Sheet
All MCG/MDG	300-5340-01	12 VDC	H389	C375
All MCG/MDG	300-5340-02	24 VDC	H389	C375
MDKAL*/AD/AE/AF	300-4686	12 or 24 VDC	H549	C492
MDKAA/AB/AL	300-5197	12 or 24 VDC	H549	C492

* MDKAL spec A only.

Sump Pump



Model	Kit Number	Instruction Sheet
MCGBA, CA, CB	120-1261	G136
MCGGA, DA, DB	120-1262	G136

Kit contains pump and mounting hardware for hand operated sump pump. Mounts on front left side of engine. Allows for removal of lube oil in the sump when unit is low or inaccessible to drain directly from the pan. Option code H520.

Drip Pan

Model	Kit Number	Instruction Sheet
MCGBA, CA	403-3168	G141
MCGGA, DA, DB	403-3167	G141

Kit contains all of the necessary material to mount a drip pan in the genset frame, under the engine, to collect any oil drippings from the genset. Option code F146.

Field Installed Options: Miscellaneous Accessories

Separator, Fuel/Water



This is a fuel filter that separates water that may be in the fuel and does not allow it to get into the injection system. Water is quite harmful to injectors, as the fuel is also a lubricant in the injectors. Option code C156 for all MCG or MDG series.

Model	149-2073* 30 Micron	149-2313* 30 Micron	149-2317** 20 Micron
MDKUB	◆		
MDKAL		◆	
MDKWB	◆		
MDKAA		◆	
MDKAB		◆	
MDKAD		◆	
MDKAE		◆	
MDKAF		◆	
MCG or MDG series			◆

* 149-1914-05 (2 Micron), 149-1914-02 (10 Micron), and 149-1914-01 (30 Micron) fuel filter replacement cartridges are available for kit 3's 149-2073 and 149-2313.

** 149-2406 (2 Micron) replacement fuel filter cartridge is available for kit #149-2317.

Oil Level Indicator

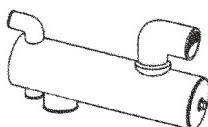
Model	Kit Number
MCGBA, MCGCA	309-0621
MCGGA, MCGDA, MCGDB	309-0622
MDGDC, MDGDD	309-0622

Kit contains hoses, oil level indicator, sight glass with adjustable indicating arrows, and necessary hardware for mounting on left side of skid. Gives a visual indication of oil level. Option code H512. Genset must also have optional harness H510.

Model	Kit Number	Instruction Sheet
MDKUB, MDKWB	123-2136	M-104

Kit contains extended oil level indicator, tube assembly, and access cover for the sound shield roof and mounting hardware to install on the genset. Requires drilling holes for rivets and access hole to mount access cover in the sound shield top by the installer. This kit allows oil level check from the top of the sound shield without opening the sound shield door. (Factory installed option H575).

Heat Exchanger



Model	Kit Number
MCGBA, MCGCA	130-4272
MCGGA, MCGDA, MCGDB	130-4273
MDGDC, MDGDD	130-4273

Kit contains the heat exchanger, sea water pump, transfer tubing hoses and necessary mounting hardware to convert a keel cooled unit to heat exchanger cooling. Option code E079.

Set Mounted Marine Generator Circuit Breaker Selection

The following tables to be used to select the appropriate AC main circuit breaker. To select the correct circuit breaker, identify the model, voltage code and frequency. * If the set is equipped with a 2 pole circuit breaker and a single pole circuit breaker is to be mounted in its place as separate blank plate 320-1813-02 must also be ordered.

Model	kW	Voltage Code	Phase	AC Voltage	AC Line Breaker	Amps	Poles	Frequency
MDKAL	7	R003	3	240/416	320-1891-09	13	3	50
		R004	3	110/190	320-1836-03	25	3	50
		R020	3	127/220	320-1836-03	25	3	50
		R023	3	254/440	320-1891-09	13	3	50
		R028	3	110/220	320-1836-03	25	3	50
		R029	3	230/400	320-1891-09	13	3	50
		R041	1	115/230	320-1689-04	30	2	50
		R046	1	110/220	320-1689-04	30	2	50
		R050	3	115/200	320-1836-03	25	3	50
		R071	3	115/230	320-1836-03	25	3	50
		R098	3	120/208	320-1836-03	25	3	50
		R099	3	220/380	320-1891-09	13	3	50
		R104	1	120/240	320-1689-04	30	2	50
		R106	3	120/240	320-1836-02	20	3	50
		R110	1	220	320-1690-15	30	1*	50
		R002	3	277/480	320-1891-09	13	3	60
		R003	3	240/416	320-1891-05	15	3	60
		R020	3	127/220	320-1836-04	30	3	60
		R023	3	254/440	320-1891-09	13	3	60
		R046	1	110/220	320-1689-06	40	2	60
		R067	3	139/240	320-1836-03	25	3	60
		R086	1	120	320-1690-04	70	1*	60
		R098	3	120/208	320-1836-04	30	3	60
		R104	1	120/240	320-1689-05	35	2	60
		R106	3	120/240	320-1836-03	25	3	60
9		R003	3	240/416	320-1891-05	15	3	50
		R004	3	110/190	320-1836-05	35	3	50
		R020	3	127/220	320-1836-04	30	3	50
		R023	3	254/440	320-1891-05	15	3	50
		R028	3	110/220	320-1836-04	30	3	50
		R029	3	230/400	320-1891-06	18	3	50
		R041	1	115/230	320-1689-06	40	2	50
		R046	1	110/220	320-1689-06	40	2	50
		R050	3	115/200	320-1836-05	35	3	50
		R071	3	115/230	320-1836-04	30	3	50
		R098	3	120/208	320-1836-04	30	3	50
9.5		R003	3	240/416	320-1891-05	15	3	50
		R004	3	110/190	320-1836-05	35	3	50
		R020	3	127/220	320-1836-04	30	3	50
		R023	3	254/440	320-1891-05	15	3	50
		R028	3	110/220	320-1836-04	30	3	50
		R029	3	230/400	320-1891-06	18	3	50
		R041	1	115/230	320-1689-06	40	2	50
		R046	1	110/220	320-1689-06	40	2	50
		R050	3	115/200	320-1836-05	35	3	50
		R071	3	115/230	320-1836-04	30	3	50
		R098	3	120/208	320-1836-04	30	3	50

Set Mounted Marine Generator Circuit Breaker Selection

Model	kW	Voltage Code	Phase	AC Voltage	AC Line Breaker	Amps	Poles	Frequency
MDKAA	9.5	R099	3	220/380	320-1891-06	18	3	50
		R104	1	120/240	320-1689-06	40	2	50
		R106	3	120/240	320-1836-04	30	3	50
		R110	1	220	320-1690-02	40	1*	50
		R002	3	277/480	320-1891-06	18	3	60
		R003	3	240/416	320-1891-03	20	3	60
		R020	3	127/220	320-1836-05	35	3	60
		R023	3	254/440	320-1891-06	18	3	60
		R046	1	110/220	320-1689-08	50	2	60
		R067	3	139/240	320-1836-05	35	3	60
		R086	1	120	320-1690-06	90	1*	60
		R098	3	120/208	320-1836-06	40	3	60
		R104	1	120/240	320-1689-07	45	2	60
		R106	3	120/240	320-1836-05	35	3	60
MDKAB	11	R003	3	240/416	320-1891-06	18	3	50
		R004	3	110/190	320-1836-06	40	3	50
		R020	3	127/220	320-1836-05	35	3	50
		R023	3	254/440	320-1891-06	18	3	50
		R028	3	110/220	320-1836-05	35	3	50
		R029	3	230/400	320-1891-03	20	3	50
		R041	1	115/230	320-1689-07	45	2	50
		R046	1	110/220	320-1689-08	50	2	50
		R050	3	115/200	320-1836-06	40	3	50
		R071	3	115/230	320-1836-05	35	3	50
		R098	3	120/208	320-1836-05	35	3	50
		R099	3	220/380	320-1891-03	20	3	50
		R104	1	120/240	320-1689-07	45	2	50
		R106	3	120/240	320-1836-05	35	3	50
13.5	13.5	R110	1	220	320-1690-08	50	1*	50
		R002	3	277/480	320-1891-03	20	3	60
		R003	3	240/416	320-1891-01	25	3	60
		R020	3	127/220	320-1836-07	45	3	60
		R023	3	254/440	320-1891-03	20	3	60
		R046	1	110/220	320-1689-10	60	2	60
		R067	3	139/240	320-1836-06	40	3	60
		R086	1	120	320-1690-07	100	1*	60
		R098	3	120/208	320-1836-07	45	3	60
		R104	1	120/240	320-1689-09	55	2	60
		R106	3	120/240	320-1836-06	40	3	60

Set Mounted Marine Generator Circuit Breaker Selection

Model	kW	Voltage Code	Phase	AC Voltage	AC Line Breaker	Amps	Poles	Frequency
MDKAD	13.5	R003	3	240/416	320-1891-01	25	3	50
		R004	3	110/190	320-1836-05	55	3	50
		R020	2	127/220	320-1836-06	40	3	50
		R023	3	254/440	320-1891-03	20	3	50
		R028	3	110220	320-1836-06	40	3	50
		R029	3	230/400	320-1891-01	25	3	50
		R041	1	115/230	320-1689-09	55	2	50
		R046	1	110/220	320-1689-10	60	2	50
		R050	3	115/200	320-1836-07	45	3	50
		R071	3	115/230	320-1836-06	40	3	50
		R098	3	120/208	320-1836-07	45	3	50
		R099	3	220/380	320-1891-01	25	3	50
		R104	1	120/240	320-1689-09	55	2	50
		R106	3	120/240	320-1836-06	40	3	50
		R110	1	220	320-1690-10	55	1*	50
17	17	R002	3	277/480	320-1891-02	30	3	60
		R003	3	240/416	320-1891-02	30	3	60
		R020	3	127/220	320-1836-09	55	3	60
		R023	3	254/440	320-1891-02	30	3	60
		R046	1	110/220	320-1689-12	70	2	60
		R067	3	139/240	320-1836-09	55	3	60
		R098	3	120/208	320-1836-05	55	3	60
		R104	1	120/240	320-1689-12	70	2	60
		R106	3	120/240	320-1836-09	55	3	60
MDKAE	17.5	R003	3	240/416	320-1891-02	30	3	50
		R004	3	110/190	320-1836-11	65	3	50
		R020		127/220	320-1836-09	55	3	50
		R023	3	254/440	320-1891-02	30	3	50
		R028	3	110220	320-1836-09	55	3	50
		R029	3	230/400	320-1891-02	30	3	50
		R041	1	115/230	320-1689-12	70	2	50
		R046	1	110/220	320-1689-13	75	2	50
		R050	3	115/200	320-1836-10	60	3	50
		R071	3	115/230	320-1836-09	55	3	50
		R098	3	120/208	320-1836-10	60	3	50
		R099	3	220/380	320-1891-04	35	3	50
		R104	1	120/240	320-1689-12	70	2	50

Set Mounted Marine Generator Circuit Breaker Selection

Model	kW	Voltage Code	Phase	AC Voltage	AC Line Breaker	Amps	Poles	Frequency
MDKAE	17.5	R106	3	120/240	320-1836-08	50	3	50
		R110	1	220	320-1690-12	75	1*	50
		R002	3	277/480	320-1891-04	35	3	60
		R003	3	240/416	320-1891-04	35	3	60
		R020	3	127/220	320-1836-12	70	3	60
		R023	3	254/440	320-1891-04	35	3	60
	21.5	R046	1	110/220	320-1689-17	95	2	60
		R067	3	139/240	320-1836-11	65	3	60
		R098	3	120/208	320-1836-12	70	3	60
		R104	1	120/240	320-1689-15	85	2	60
		R106	3	120/240	320-1836-11	65	3	60
MDKAF	22.5	R003	3	240/416	320-1891-04	35	3	50
		R004	3	110/190	320-1836-14	80	3	50
		R020	3	127/220	320-1836-12	70	3	50
		R023	3	254/440	320-1891-04	35	3	50
		R028	3	110/220	320-1836-12	70	3	50
		R028	3	230/400	320-1891-08	40	3	50
		R029	3	115/230	320-1689-16	90	2	50
		R041	1	110/220	320-1689-17	95	2	50
		R046	1	115/200	320-1836-13	75	3	50
		R050	3	115/230	320-1836-11	65	3	50
		R071	3	120/208	320-1836-12	70	3	50
		R098	3	220/380	320-1891-08	40	3	50
		R099	3	120/240	320-1689-15	85	2	50
	27.5	R104	1	120/240	320-1836-11	65	3	60
		R106	3	120/240	320-1690-14	95	1*	50
		R110	1	220	320-1891-08	40	3	60
		R002	3	277/480	320-1891-07	45	3	60
		R003	3	240/416	320-1836-14	80	3	60
		R020	3	127/220	320-1836-15	85	3	60
		R023	3	254/440	320-1891-07	45	3	60
		R067	3	139/240	320-1836-14	90	3	60
		R098	3	120/208	320-1836-16	100	2	60
		R104	1	120/240	320-1689-18	80	3	60
		R106	3	120/240	320-1836-14			

Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

The following table should be used to size the main line circuit breaker for MCG Series generator sets:

After calculating the amperage of the generator based on its kW rating, pick either the standard or optional circuit breaker which is closest in size and meets the system's requirements and follow the table across to determine which leads are needed.

Mounting Kit 320-1711 should be ordered for all ratings.

1 phase: $(\text{kW} \times 1000 \times 1.2) / (0.8 \times \text{AC volt output}) = \text{amps}$

3 phase: $(\text{kW} \times 1000 \times 1.2) / (0.8 \times \text{AC volt output} \times 1.732) = \text{amps}$

Example 1: 55 kW set, 1phase, 120/240 volts output:
 $(55 \times 1000 \times 1.2) / (0.8 \times 240 \text{ volts}) = 344 \text{ amps}$

The nearest size circuit breaker would be a 2-pole 350 amperes rating.

Example 2: 55 kW set, 3 phase, 120/208 volts/s:
 $(55 \times 1000 \times 1.2) / (0.8 \times 208 \text{ volts} \times 1.732) = 229 \text{ amps}$

The nearest size circuit breaker would be a 3-pole 225 amperes rating.

The mounting is identical to the production version of the option. The part no. of the circuit breaker alone does not include ANY hardware. If the circuit breaker is replaced with another, additional hardware may be required including interconnect lead assemblies.

Amp Rating	Pole	Volt Rating	Standard Circuit Breaker Part Number	Optional 12V Shunt Trip Circuit Breaker Part Number	Optional 24V Shunt Trip Circuit Breaker Part Number	Auxiliary Contact	Lead-L0 * Part Number & Quantity Needed	Lead-L1 * Part Number & Quantity Needed	Lead-L2 * Part Number & Quantity Needed	Lead-L3 * Part Number & Quantity Needed
125	2	240	320-1555-01	320-1557-01	320-1556-01	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)	—
150	2	240	320-1555-02	320-1557-02	320-1556-02	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)	—
175	2	240	320-1555-03	320-1557-03	320-1556-03	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)	—
200	2	240	320-1555-04	320-1557-04	320-1556-04	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)	—
225	2	240	320-1555-05	320-1557-04	320-1556-05	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)	—
250	2	240	320-1555-11	320-1557-51	320-1556-11	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)	—
300	2	240	320-1555-12	320-1557-52	320-1556-12	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)	—
350	2	240	320-1555-13	320-1557-53	320-1556-13	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)	—
400	2	240	320-1555-14	320-1557-54	320-1556-14	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)	—

* All separate lead assemblies have to be ordered through PDC (Parts Dept.) and not through the Accessories Group. The circuit breakers are to be ordered through the Accessories Group.

Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

Amp Rating	Pole	Volt Rating	Standard Circuit Breaker Part Number	Optional			Lead-LO * Part Number & Quantity Needed	Lead-L1 * Part Number & Quantity Needed	Lead-L2 * Part Number & Quantity Needed	Lead-L3 * Part Number & Quantity Needed
				12V Shunt Trip Circuit Breaker Part Number	24V Shunt Trip Circuit Breaker Part Number	Auxiliary Contact				
125	2	600	320-1513-01	320-1557-06	320-1522-06	320-1516-10	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	—
150	2	600	320-1513-02	320-1557-07	320-1522-07	320-1516-11	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	—
175	2	600	320-1513-08	320-1557-08	320-1522-09	320-1556-06	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	—
200	2	600	320-1513-10	320-1522-10	320-1556-07	320-1522-11	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	—
225	2	600	320-1513-06	320-1522-12	320-1556-12	320-1557-16	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	—
250	2	600	320-1513-08	320-1557-57	320-1556-10	320-1556-15	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	—
300	2	600	320-1513-09	320-1557-58	320-1557-17	320-1556-16	226-0893 (3)	226-3455-01 (3)	226-3455-02 (3)	—
350	2	600	320-1513-10	320-1557-18	320-1556-18	320-1557-19	226-0893 (3)	226-3455-01 (3)	226-3455-02 (3)	—
400	2	600	320-1513-11	320-1557-20	320-1556-18	320-1557-63	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
450	2	600	320-1513-12	320-1557-64	320-1464-02	320-1557-66	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
500	2	600	320-1513-13	320-1555-10	320-1464-04	320-1555-12	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
600	2	600	320-1513-14	320-1555-15	320-1464-06	320-1555-16	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
125	3	240	320-1555-06	320-1555-17	320-1464-07	320-1555-18	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
150	3	240	320-1555-07	320-1555-08	320-1468-06	320-1555-09	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
175	3	240	320-1555-08	320-1555-09	320-1468-07	320-1555-10	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
200	3	240	320-1555-09	320-1555-10	320-1468-08	320-1555-11	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
225	3	240	320-1555-10	320-1555-15	320-1468-09	320-1555-16	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
250	3	240	320-1555-11	320-1555-16	320-1468-10	320-1555-17	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
300	3	240	320-1555-12	320-1555-18	320-1468-11	320-1555-19	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
350	3	240	320-1555-13	320-1555-18	320-1468-12	320-1555-20	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
400	3	240	320-1555-14	320-1555-18	320-1464-08	320-1464-09	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-03 (2)
125	3	600	320-1460-01	320-1460-02	320-1464-10	320-1464-11	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
150	3	600	320-1460-03	320-1460-04	320-1464-12	320-1464-13	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
175	3	600	320-1460-05	320-1460-06	320-1464-14	320-1464-15	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
200	3	600	320-1460-07	320-1460-08	320-1464-16	320-1464-17	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)

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Set Mounted Marine Generator Circuit Breaker Selection MCG, MDG Series Generator Sets

Amp Rating	Pole	Volt Rating	Standard	Optional			Lead-LO * Part Number & Quantity Needed	Lead-L1 * Part Number & Quantity Needed	Lead-L2 * Part Number & Quantity Needed	Lead-L3 * Part Number & Quantity Needed
				Circuit Breaker Part Number	12V Shunt Trip Circuit Breaker Part Number	24V Shunt Trip Circuit Breaker Part Number				
225	3	600	320-1460-05	N/A	320-1472-10	N/A	226-0893 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-02 (1)
250	3	600	320-1460-06	N/A	320-1472-11	N/A	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)
300	3	600	320-1460-07	N/A	320-1472-12	N/A	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)
350	3	600	320-1460-08	N/A		N/A	226-0893 (2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)
400	3	600	320-1460-09	N/A		N/A	226-0893-(2)	226-3455-01 (2)	226-3455-02 (2)	226-3455-02 (2)
450	3	600	320-1460-10	N/A		N/A	226-0893-(3)	226-3455-01 (3)	226-3455-02 (3)	226-3455-02 (3)
500	3	600	320-1460-11	N/A		N/A	226-0893-(3)	226-3455-01 (3)	226-3455-02 (3)	226-3455-02 (3)
600	3	600	320-1460-12	N/A		N/A	226-0893-(3)	226-3455-01 (3)	226-3455-02 (3)	226-3455-02 (3)
40	3	480	320-1458-21	N/A		N/A	226-3505 01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
45	3	480	320-1458-22	N/A		N/A	226-3505 01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
50	3	480	320-1458-23	N/A		N/A	226-3505 01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
60	3	480	320-1458-24	N/A		N/A	226-3505 01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
70	3	480	320-1458-25	N/A		N/A	226-3505 01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
80	3	480	320-1458-26	N/A		N/A	226-0893 00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
90	3	480	320-1458-27	N/A		N/A	226-0893 00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
100	3	480	320-1458-28	N/A		N/A	226-0893 00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (1)
40	3	600	320-1458-38	N/A		N/A	226-3505-01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
45	3	600	320-1458-39	N/A		N/A	226-3505-01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
50	3	600	320-1458-40				226-3505-01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
60	3	600	320-1458-41				226-3505-01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
70	3	600	320-1458-42				226-3505-01 (1)	226-3456-01 (1)	226-3456-02 (1)	226-3456-03 (1)
80	3	600	320-1458-43				226-0893-00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (2)
90	3	600	320-1458-44				226-0893-00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (2)
100	3	600	320-1458-45				226-0893-00 (1)	226-3455-01 (1)	226-3455-02 (1)	226-3455-03 (2)

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Marine Service Support Literature (English*)

For a complete list of Onan Marine literature, including manuals for older models, see the Onan Product Guide Post-Sale Literature Index #932-0112, or contact your Onan distributor.

Manuals:

Current Model (diesel fuel) Series	Engine Operator Manual	Engine Operator Manual	Engine Service Manual	Generator Parts Manual	Generator Service Manual	Installation Manual	Parts Manual
MDKUB Spec A-C	981-0134		981-0514		981-0512	981-0602	981-0251
MDKUB Spec D-E	981-0151				981-0512	981-0602B	981-0262B
MDKAL Spec A	981-0102		981-0528		981-0524B	981-0616	981-0261B
MDKAL Spec B	981-0103B		981-0528		981-0524C	981-0616B	981-0261B
MDKWB Spec A-C	981-0134		981-0514		981-0512	981-0602	981-0252
MDKWB Spec D-E	981-0151B				981-0512	981-0602B	981-0262B
MDKAA	981-0103B		981-0528		981-0524C	981-0616B	981-0260B
MDKAB	981-0103B		981-0528		981-0524C	981-0616B	981-0260B
MDKAD Spec A	981-0140		981-0521		981-0520B	981-0608	981-0264
MDKAD Spec B	981-0140		981-0521		981-0520B	981-0608	981-0264
MDKAD Spec C	981-0156		981-0521		981-0520B	981-0617	981-0264
MDKAE Spec A	981-0140		981-0521		981-0520B	981-0608	981-0264
MDKAE Spec B	981-0140		981-0521		981-0520B	981-0608	981-0264
MDKAE Spec C	981-0156		981-0521		981-0520B	981-0617	981-0264
MDKAF Spec A	981-0140		981-0521		981-0520B	981-0608	981-0265
MDKAF Spec B	981-0156		981-0521		981-0520B	981-0617	981-0265
MCGBA Spec A-C	960-0148	960-0020	NA	960-0022	960-0506	960-0613	960-0200
MCGBA Spec D	960-0151	960-0020	NA	960-0022	960-0508	960-0616	960-0206
MCGCA Spec A-C	960-0148	960-0020	NA	960-0022	960-0506	960-0613	960-0200
MCGCA Spec D	960-0151	960-0020	NA	960-0022	960-0508	960-0616	960-0206
MCGGA Spec A-C	960-0148	960-0020	NA	960-0032	960-0506	960-0613	960-0200
MCGGA Spec D	960-0151	960-0020	NA	960-0032	960-0508	960-0616	960-0206
MCGDA Spec A-C	960-0148	960-0020	NA	960-0508	960-0506	960-0613	960-0200
MCGDA Spec D	960-0151	960-0020	NA	960-0508	960-0508	960-0616	960-0206
MCGDB Spec A-C	960-0148	960-0020	NA	960-0032	960-0506	960-0613	960-0200
MCGDB Spec D	960-0151	960-0020	NA	960-0032	960-0508	960-0616	960-0206
MDGDA Spec A-C	960-0146	960-0020	NA	960-0508	960-0506	960-0612	960-0200
MDGDA Spec D	960-0151	960-0020	NA	960-0508	960-0508	960-0616	960-0206
MDGDB Spec A-C	960-0146	960-0020	NA	960-0032	960-0506	960-0612	960-0200
MDGDB Spec D	960-0151	960-0020	NA	960-0032	960-0508	960-0616	960-0206

Discontinued Models (gasoline fueled)

MAJB	933-0121		933-0502		933-0502	933-0600	933-0221
MCCK A-G		927-0752		927-0752	927-0121	927-0221	
MCCK H-J	927-0121	927-0752		927-0752	927-0121	927-0024	
MCE	927-0124	927-0505		927-0505	927-0600	927-0225	
MME	918-0100	918-0500		918-0500	918-0100	918-0200	

Discontinued Models (diesel fueled)

MDKC	981-0120		981-0501		981-0502	981-0600	981-0220
MDKD	981-0120		981-0501		981-0502	981-0600	981-0222
MDL3	934-0124		934-0500		934-0500	934-0602	934-0229
MDL4	934-0124		934-0500		934-0500	934-0602	934-0229
MDL6	934-0124		934-0500		934-0500	934-0602	934-0229
MCGCB	960-0148	960-0020	NA	960-0022	960-0506	960-0613	960-0200

*Other languages available for some models. Contact your Onan distributor for more information.
Operator, installation and parts manual included with every set.

Marine Service Parts

After Sale Support

Genuine Onan Maintenance Parts and Products—For your ongoing satisfaction and the dependability of your Onan marine gensets, Onan offers a complete line of replacement and tune-up parts, accessories and oil and maintenance chemicals. Onan marine parts are packaged for correct selection and convenient on-board storage.

Easy to locate certified Onan Service and Parts Dealer—Onan has the largest and best-trained worldwide certified Distributor/Dealer network in the industry, offering on-time parts and service and installation assistance. Onan Distributor/Dealers stock and sell commonly used Onan marine genset maintenance parts, accessories and products, plus operator manuals and literature on current Onan gensets. They can help you select and install the right genset for a new vessel or accessories on older models, or provide answers to questions on proper operation and maintenance procedures.

Onan® Marine Generators offer cruise kits designed to keep you cruising.

Models and part numbers include:

<u>Model</u>	<u>Part Number</u>
MDKAU	100-3478-08*
MDKUB	100-3478-01**
MDKUB/Spec E	100-3478-07
MDKD	100-3478-03
MDKAL/MDKAV/MDKBG	100-3478-02
MDKWB	100-3478-01**
MDKWB/Spec E	100-3478-07
MDKAA/MDKAW	100-3478-02
MDKAB/MDKAZ	100-3478-02
MDKAD/MDKBD	100-3478-04
MDKAE/MDKBE	100-3478-04
MKDAD/MDKBF	100-3478-06
MGKBC/D	100-3478-09*
Isolated Ground:	
MDKAD/E/F and MDKBD/E/F	100-3478-05



Included in the cruise kits are the following commonly used maintenance and service parts:

- Oil Filter—2
- Sea Water Pump Impeller Kit—2
- Alternator Belt—1
- Zinc Pencil—2*
- Fuel Filter—2**
- Spark Plugs—2*
- Convenient Plastic Carrying Case

* Note: For MDKAU, and MGKBC/D: zinc pencil not required and not included; oil filter wrench and spark plugs are included.

** Note: For MDKUB and MDKWB (prior to Spec E), fuel filter not included.

To easily locate the nearest Onan Distributor/Dealer, or for more information, contact Onan at 1-800-888-ONAN or 763-574-5000; 1400 73rd Avenue N.E., Minneapolis, MN 55432 U.S.A.; fax 763-528-7242; e-mail feedback@onan.com; www.onan.com.

Index of Field Installed Options

Exhaust Accessories, Sound Shields & Cooling System Conversions

Dry Exhaust Conversion	5
Dry Exhaust Muffler	4
Front Exhaust Exit (Wet Exhaust-Engine End)	4
Flexible Exhaust Tube (For Dry Exhaust Systems)	5
Front Power Take-Off (FPTO)	6
Keel Cooling Conversion System	5
Sound Shield	6
Stainless Steel Exhaust Elbow	3
Wet Exhaust Hose For Exhaust Systems	3
Wet Exhaust Muffler	3, 4

Meter Panels & Gauges

A/C Meter Panel.....	10
Ammeter/CT Kits.....	10
Basic Panel.....	8
Deluxe Panel with Hourmeter	8
Deluxe Panel with Voltmeter	8
Dual Gauge Conversion	9
Oil Temperature Gauge	10
Remote Gauge Panels	9
Safety Shutdown Override	10
Set Mounted Gauge Panel.....	9
6 Gauge Control Conversions	10
Tachometer	10

Harnesses

Adapter Harnesses	11, 12
AC Control Extension Harness (20 ft.)	12
Basic Accessory Panel Harness	11
Deluxe Accessory Panel Harness	11
Gauge Package Accessory Panel Harness	11
DC Control Harness Extension	12

Miscellaneous Electric

Alternator	15
Annunciation	14
Belt Tensioner	15
Circuit Breaker Mounting Kit	14
Compensator-Droop	13
Control Options Wiring Harness	13
Cross Current Compensation	14
Dry Contacts Alarm Relay	14
Electronic Governor	13
Heater Battery	15
Heater Oil Pan.....	14
Isolated DC Conversion System.....	15
Overspeed Shutdown	15
PMG Upgrade	13
Voltage Regulator, Manual	13

Miscellaneous Accessories

Drip Pan.....	17
Engine Oil Filter Fuel Pump Side.....	17
Heat Exchanger	18
Low Coolant Level Shutdown	17
Manual Transfer Switch	16
Metric Adapter Fittings for Fuel Lines	16
Oil Level Indicator	18
Separator, Fuel/Water	18
Siphon Break Kit	16
Starting Batteries	16
Sump Pump	17

Contact your Distributor/Dealer for more information:



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